

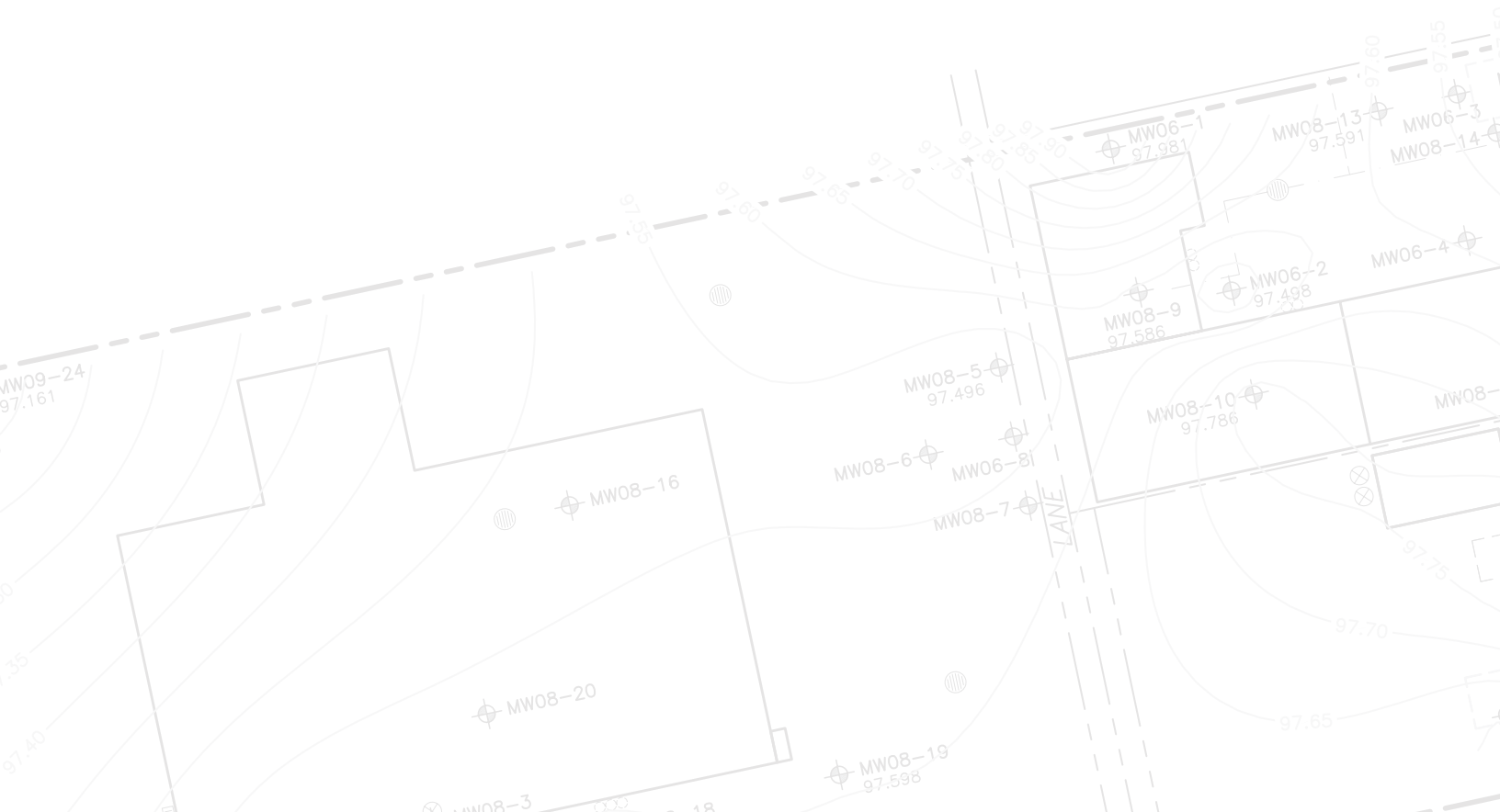


**CSAP**

Society of Contaminated  
Sites Approved Professionals  
of British Columbia

ANNUAL REPORT 2011-2012

# A YEAR OF PRECEDENTS



## Our Vision

*CSAP Society is a leader and catalyst for innovative, value-driven approaches to improving land and water quality for the beneficial use of all.*

## About Us

The CSAP Society is an independent professional organization that is mandated by the Provincial Government, through the Ministry of Environment, to review environmental certification applications made under the Environmental Management Act and Contaminated Sites Regulation. The Society credentials its members and recommends

their appointment to the Ministry of Environment Roster of Approved Professionals (APs).

In BC, the Ministry of Environment is responsible for regulations detailing safe and legal levels of soil and water contaminants. Members of the CSAP Society are qualified to review all low to medium environmental certification applications to ensure these regulations are being met.

They perform an important role for the government and for landowners by addressing potential contamination issues in a timely manner which helps advance redevelopment projects. All low to medium risk sites seeking a ministry Certificate of Compliance must be reviewed by a Contaminated Site Approved Professional.

## MESSAGE FROM THE MINISTRY

**T**he remediation of contaminated land in BC remains an important, ongoing goal for the Ministry of Environment. Progress in this area can be defined in many ways but is principally viewed by the progress in reducing the number of contaminated sites in the province and by the completion of remediation at sites.

The Land Remediation Section is pleased to work with the Contaminated Sites Approved Professional Society (CSAP) to ensure best practices across the province when applying the Environmental Management Act to contaminated site remediation. With the support of our partners at CSAP, British Columbia continues to demonstrate a leadership role in the investigation and remediation of contaminated sites, and in the development of progressive policies and guidance to support these activities.

The CSAP Society was incorporated in 2007 as a self-regulating professional association focused on moderate and low-risk site assessment and remediation reviews. Five years on, the CSAP Society continues to fulfill their mandate, honing professional development programs, and providing oversight and high quality reviews of their members. This work contributes to the education of all professionals in the industry and ensures public and environmental interests are being served.

I wish to acknowledge the dedication and contributions of the CSAP Society and its members; and to give recognition to the accomplishments achieved in 2011 under the direction of Jim Malick, President; the CSAP Board of Directors, and Catherine Schachtel, Executive Director.



**MIKE MACFARLANE**

Director, Land Remediation  
Environmental Management Branch  
B.C. Ministry of Environment

## MESSAGE FROM THE PRESIDENT

J.G. Malick, Ph.D., R.P.Bio., P.Ag.



During 2011/2012 the CSAP Society continued to fulfill our mandate by fostering membership, providing professional development opportunities and continuously improving our client service and performance assessment process. Our board committees have continued to clarify, improve and update our internal documentation and processes to make them more understandable and transparent. We also forged ahead with forming and enhancing linkages with our “parent” professional organizations, the BC Ministry of Environment and industry stakeholders. Our members also provided valuable technical input to government with the goal of improving our reputation as a leader and catalyst for positive change in the contaminated sites regulatory regime in BC.

### New Faces

This year we welcomed Carrie Baron to our Board of Directors. Carrie represents the Union of BC Municipalities and is the Drainage & Environment Manager for the City of Surrey. With 26 years of experience as an engineer, her hands-on experience is of great value to the board.

We also welcomed new office staff Judy Gunderson and Anna Popova. Together, with the leadership of executive director, Catherine Schachtel, we have a great team that will no doubt further enhance our operations and efficiency.

### Strategic Objectives

The board strives to take a forward-looking approach to improving CSAP to ensure its long term relevance in our industry and to enhance our working relationship with the Ministry of Environment as a trusted source of feedback and information. Looking forward into 2012-13 our objectives include:

- › Building awareness and our reputation in the business community in ways that demonstrate value
- › Continuing to assist the Ministry in developing technical approaches and associated policies that meet the needs of the Province
- › Providing support to prospective members on their path to completing the CSAP examinations and becoming members.

Interesting professional development opportunities are also in the planning stages for the coming year.

### Our Accomplishments

Finally, as I am in my final few weeks as President of CSAP, I've had the opportunity to contemplate some of our accomplishments since CSAP's inception. As one of the volunteers to form a shadow board to work with the original Roster Steering Committee, it has been interesting to watch and take part in the development of the legal structure, supporting documents, policies and the myriad of “stuff” that has to happen to nurture an organization from a fledgling to a recognized and respected entity.

We have progressed from being unknown and untried to gaining the respect of many stakeholders and forming a strong working relationship with the Ministry of Environment. We have also been commended for good governance, in addition to the processes we have implemented and the effort taken to develop useful professional development opportunities for our members and others. This has been a team effort by the members of the Board, many volunteers and, not least, our executive director Catherine Schachtel who has been unwavering in her efforts to make CSAP a valued and recognized organization.

There is more to be done. There are always new challenges and elements that need reconsideration, but I am certain that CSAP is in good hands with a well-disciplined Board as well as a strong executive team, executive director and a supportive membership.



J.G. Malick, Ph.D., R.PBio., P.Ag.  
President

*There is more to be done. There are always new challenges and elements that need reconsideration, but I am certain that CSAP is in good hands with a well-disciplined Board as well as a strong executive team, executive director and a supportive membership.*

*J.G. Malick, Ph.D., R.PBio., P.Ag.*



## MESSAGE FROM THE EXECUTIVE DIRECTOR

Catherine Schachtel, B. Ed.



2011-12 was another busy year for CSAP. There were many 'firsts' and the committees certainly hit their stride in terms of completing several long term projects. I will provide a brief overview, focusing on the many 'firsts' we achieved, leaving the details to the committee reports.

### A Year of Precedents

---

- › Our first hands-on professional development workshop took place in January 2011. The Statistics for Contaminated Sites workshop was well received and will be held again next spring as a two-day workshop.
- › We launched our first quarterly news update for members in March 2011. This update is designed to keep members up to speed between formal professional development workshops.
- › We led a full consultation process over Technical Guidance 6 issues identified through a stakeholder focus group. We were instrumental in bringing members, industry and other stakeholders, together with the Ministry of Environment, in Working Groups which allowed various perspectives to be heard in a single process. This consultation resulted in three white papers being presented to the Ministry of Environment in December 2011. We continue to do outreach to involve other stakeholders, individual and other non-government organizations in our sector.
- › CSAP announced new 'Small Project Funding' to fund projects that produce an authoritative report or guide to assist CSAP and the Ministry of Environment to resolve issues, implement solutions, assist policy makers and inform decisions on technical matters of relevance to the practice of contaminated sites.
- › We initiated a research project to benchmark the economic value of the contaminated sites sector to the British Columbia economy.
- › Over the year, we substantially updated the CSAP website, including a new section for stakeholders.
- › We improved the examination process including updating membership application forms and the exam development format.
- › We now have terms of reference on file for all eight CSAP Committees.

CSAP is an excellent example of team work, made possible by the commitment of the Directors (all of whom chair a committee), the dedicated crew of volunteers, and the oversight of the Executive Committee.

### Looking Forward

---

The Ministry has requested two new Working Groups be established to review Protocol 9: Determining Background Groundwater Quality and Area-Wide Contamination. The Technical Review Committee will again provide leadership to the process. We are working to offer a new format and include international input for our Fall Professional Development Workshop, which will address "The role of sustainable remediation and the triple bottom line."

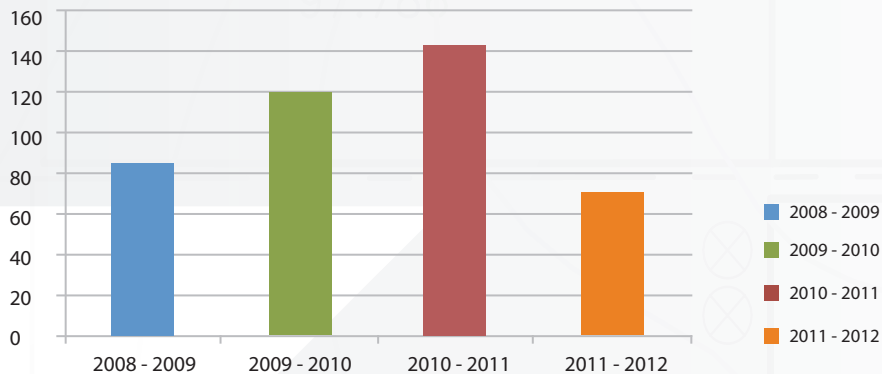
## A Heartfelt Thank -You to Retiring board Members

As is often the case, the very Directors that are crucial to the “start-up phase” of a new society retire just as all the hard won processes and procedures that make the society viable are in place! Jim Malick, retiring President, has been a formidable leader and tireless mentor to me, always making himself available for consultation. The Society has been well served by his business experience and expertise. Retiring Director Alan Walker, past Vice President and current Chair of the Governance Committee was an active supporter of the CSAP process stretching back to the Roster Steering Committee days. We gained much from his expertise and historical perspective. Jim and Alan will both be missed.



Catherine Schachtel, B.Ed.  
Executive Director

## Total Submissions Received by CSAP



*CSAP is an excellent example of team work, made possible by the commitment of the Directors (all of whom chair a committee), the dedicated crew of volunteers, and the oversight of the Executive Committee.*

*Catherine Schachtel, B.Ed.*

# COMMITTEE REPORTS

OUR VALUE  
RESPECT | WISE STEWARDSHIP | ETHICS | LEARNING



## GOVERNANCE

### Committee Chair

Alan Walker, P.Eng.

### Members

John Lambert, P.Geo.

Jerry Naus, P.Eng.



## PURPOSE

The purpose of the Governance Committee is to recommend processes for the effective functioning of the Board and the committees, task forces, and any other work undertaken by the Board. The Committee is responsible for the development, recommendation to the Board and assessment of governance principles and policies approved by the Board. The committee also has a “forward looking” responsibility to identify the skills and experience needed to further the strategic goals and objectives of the Board, as provided in the CSAP constitution.

I am retiring as a Director, having been involved in the development of the society from concept in 2003 to today's fully realized operations. It has been my absolute pleasure to work with so many insightful and dedicated individuals over that time, and I am proud of the organization that has been developed. I encourage all members to become engaged through volunteering on committees or the Board. It is a great way to learn and get perspective. Best regards to new incoming Directors I'm sure that they will find the work stimulating.

Alan Walker, Chair

## Report

At last year's Annual General Meeting, in keeping with the duties of the committee, the membership was surveyed regarding the issue of consecutive terms for board and committee participation. As a result of membership feedback, the committee recommended a change to the CSAP Bylaws which will be voted on at this year's AGM. The proposed change will limit the number of two-year consecutive terms a Director may sit to two. A former director would become eligible for re-election after sitting out one term.

## Committee Appointments

In addition, appointment limits for committee members were incorporated into the revised Terms of Reference to encourage appropriate turnover and provide better opportunity for participation of members at the committee level. The Board accepted the recommendation that all committee appointments be reviewed annually by the Board to ensure adequate turnover.

## New Terms of Reference

Another major milestone completed this year was the development of a Terms of Reference document for each committee to define its purpose, goals objectives and reporting obligations. Terms of Reference are living documents and as such are to be reviewed annually to ensure they are up-to-date and reflect the activities of the committee accurately.

## Candidate Search

Also in keeping with our mandate to identify potential Board candidates who possess the skills and experience needed to maintain governance continuity while advancing the goals and objectives of the society, the committee put forward a slate of candidates for the 2012 Election of Directors. In reviewing the slate, the committee has considered a number of factors including the existing board (e.g., professional affiliation, numeric/risk), previous participation through committee work, the cycle of elections and the consecutive terms limit.

I would like to thank the members of this committee and more broadly the committee chairs for their help in completing the Terms of Reference.



# MEMBERSHIP

## Committee Chair

Guy Patrick, P. Eng.

## Members

Tony Gillett, P. Eng.  
Reg North, P.Geo., P.Eng.  
Sam Reimer, P. Ag.  
Trish Miller, R.P. Bio.



## PURPOSE

The Membership

Committee administers the membership application and examination process, evaluates applications as well as examination results and makes recommendations to the CSAP Society board regarding new member appointments.

The committee also considers membership matters, including membership renewal requirements given extraordinary circumstances, and considering member concerns regarding the application and examination. Our objectives are to ensure both existing members and new applicants are treated fairly and that they meet the requirements for qualification.

## Report

Over the past year we have made substantial progress in streamlining the membership application process. The membership application form has been modified to make it easier to understand and use, and we are currently looking at rolling out a "fillable" Experience Review form. Previously, renewal dates were scattered throughout the year. This year, we changed the annual renewal dates for all memberships to January 1st. As a result, members' annual professional development hours will be due January 1st as well.

We are also looking to the future, and are considering the logistics of a "CSAP-in-Training" membership to serve the needs of prospective CSAP members. Finally, we have recently retained the services of a highly qualified consulting firm to assist with the preparation and setting of the CSAP exams.

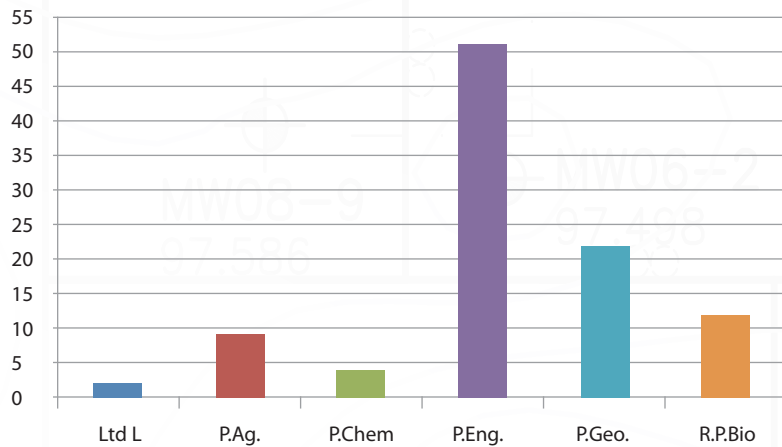
We have had a busy year, and look forward to addressing issues that may arise with membership as the year progresses.

Guy Patrick, Chair

## Member Participants 2011 / 2012

Kenneth Evans	Michael Geraghty	Eva Gerencher	Tony Gillett
Harby Bains	Art Hildebrand	Laura Koch	John Lambert
Jim Malick	Ian Marsh	Patricia Miller	Ian Mitchell
Allan Morrison	Jerry Naus	David Newton	Reg North
Cindy Ott	Guy Patrick	Beth Power	Sam Reimer
Robin Jones	Gregory Sutherland	Robert Symington	John Taylor
Kristi Thornhill	Gabriel Viehweger	Alan Walker	Jim West
David Williams	Ross Wilson	Reidar Zapf-Gilje	

## Membership by Parent Organization



## Member Participation 2011 / 2012

Members Participating	35
Average hours given	60
Highest number of hours	217.5
Total participation hours	2,050

## Welcome!

### New Members

Robert Lauman, P.Chem., SAS

Lesley Reid, P.Eng., SAS

Jeffery (Jeff) Taylor, P.Eng., SAS

### Returning Member

Marc Cameron, R.P.Bio, RAS

## PROFESSIONAL DEVELOPMENT

### Subcommittee Chair

Ken Evans, P. Eng.

### Committee

Colin Dunwoody, P. Eng.  
Michael Geraghty, P. Geo.



## PURPOSE

Maintaining high professional standards in a fast moving field requires a commitment to continuous improvement. The Professional Development Committee leads the society in our efforts to ensure Approved Professionals remain at the leading edge of their professions. CSAP Workshops actively promote continuous learning and help bring together members and the committee to discuss potential future topics for educational programming.

## Report

This year we held a number of successful events. For each event, the following table presents the number of attendees that were present and classifies them into one of three groups: members, non-members and stakeholders

### CSAP Profession Development Workshops Attendees

	Date	Members	Non-member	Stakeholders	Total
Practical Statistics for Contaminated Sites	Jan-12	29	n/a	n/a	29
Fall Workshop	Oct-11	53	102	24	179
Annual General Meeting	Jun-11	36	n/a	n/a	36
Stakeholder Technical Guidance Focus Group	Jun-11	7	n/a	30	37
Spring Workshop	May-11	71	61	12	144

## Workshops

Two workshops were held in May and October 2011 and a third in January 2012. The first two were the regular multi-topic workshops whereby in the morning, members discussed several issues of current interest. The afternoon featured presentations by the Ministry of Environment on various protocols, procedures and guidance documents they have prepared. Some of these were new documents that will be issued in the future, while others were revisions of currently available documents.

The January 2012 workshop was a one-day hands-on workshop on Practical Statistical Methods for Contaminated Sites. The primary presenter was Dr. Dennis Helsel, Ph.D. from Virginia Polytechnic Institute and State University. Approximately 30 CSAP members attended the workshop. Feedback indicated that while the workshop was beneficial, one day was not sufficient. As a result, CSAP will be organizing a second two-day workshop in early 2013.



## Newsletter

---

In addition to the workshops, the first quarterly newsletter was issued on March 29, 2012. This newsletter provided updates on a number of topics of interest to members and was a first for the CSAP Society.

Looking forward to next year, the Fall professional development workshop will focus on sustainable remediation. Examples of potential topics will include implementation of a “triple bottom line” approach and the role of the “carbon footprint” in remediation.

I would like to thank my fellow committee members and staff for their efforts to making this past year a success and look forward to working with them next year.

---

Ken Evans, Subcommittee Chair





# TECHNICAL REVIEW

## Subcommittee Chair

Greg Sutherland, Ph.D., R.P.Bio.

## Committee

Colin Dunwoody, P. Eng  
Michael Geraghty, P. Geo.  
Eva Gerencher, P. Ag.  
Reg North, P. Geo, P. Eng.  
Beth Power, R.P.Bio



## PURPOSE

The Technical Review

Subcommittee manages the Technical Review Process, the CSAP Scholarship Program, the newly established CSAP Small Research Project Funding program and other technical issues on behalf of CSAP.

## Report

In 2011-2012, a technical review of draft Protocol 20: Detailed Ecological Risk Assessment Requirements was completed as was the technical review regarding screening of contaminants of potential concern in risk assessments. The latter was finalized as a CSAP guidance document. Two other technical reviews were initiated and are currently underway. They address development of attenuation factors for trench worker exposure and ecological risk assessment policy.

## Working Groups

At the request of the CSAP Board of Directors, the Technical Review Subcommittee assembled and led three working groups in 2011 to examine three key issues:

- › Iron and Manganese Drinking Water Use Standards
- › Drinking Water Exemption Criteria
- › Soil Standards Protective of Drinking Water

The objective of the working groups was to develop practical solutions and approaches for the Ministry of Environment's consideration. The chair of each working group was

a member of the Technical Review Subcommittee. Working groups were comprised of CSAP member volunteers, stakeholders and representatives from the Ministry of Environment. The findings and recommendations of each working group were presented at the October CSAP professional development workshop and finalized reports were provided by each working group to the Ministry of Environment in December 2011. The reports are currently under review. Our approach to bring together working groups with representatives from CSAP, stakeholders and ministry personnel was deemed a

success and we look forward to using this process again in 2012-2013.

## Scholarships

The CSAP Society supports the next generation of Contaminated Site Approved Professionals by offering up to three \$5,000 annual scholarships to applied science and engineering graduate students whose research is relevant to the assessment and remediation of contaminated sites. The CSAP Student Scholarship Program is managed and adjudicated by the Technical Review Subcommittee. The closing date

for receiving applications each year is March 31st and we look forward to awarding this year's successful candidate(s).

## Grants for Research

Earlier in 2012, the CSAP Technical Review Committee was pleased to release the application package for the CSAP small research project funding. The Small Research Project Fund provides a grant of up to \$15,000 for projects that will produce an authoritative report or guide to assist CSAP and the Ministry of Environment to resolve issues, implement solutions, assist policy makers and inform decisions on technical matters of relevance to the practice of contaminated sites. Any individual, private company, university or other institution - either individually or as a collaborative venture - is eligible to apply for CSAP Small Research Project funding. The first intake for applications closes June 30, 2012.

I would like to thank the committee members, those that completed technical reviews, the members of the TG6 Working Groups and the CSAP staff for making this a productive and successful year and I look forward to working with them next year.

Greg Sutherland,  
Subcommittee Chair

## THANK YOU TO CSAP TG6 WORKING GROUP PARTICIPANTS

### TG6 Working Group: Iron and Manganese in relation to organic contamination

Lead: Greg Sutherland

Participants	Representing
Raminder Grewal	Urban Development Institute
Paul Gordon (Suncor)	Canadian Petroleum Producers Institute
Phil De Leeuw	BC Business Council
Peggy Evans	Ministry of Environment
Robin Jones	CSAP
Ian Mitchell	CSAP

### TG6 Working Group: Examination of Exemption Criteria

Lead: Dave Tiplady , Michael Geraghty

Participants	Representing
Stephen Munzar, SAB	Science Advisory Board
Carrie Baron, UBCM	Union of BC Municipalities
Jo-Ann Aldridge,	Health Canada
Beau Jarvis (Developer	Developer
Eric Nickel (Shell)	Canadian Petroleum Producers Institute
Phil De Leeuw	BC Business Council
Gregg Stewart	Ministry of Natural Resource
Peggy Evans	Ministry of Environment
Dave Newton	CSAP

### TG6 Working Group Examine DW as a factor in soil assessment

Lead: Reg North

Participants	Representing
Glyn Fox, George Szefer	Ministry of Environment
Will Ratcliffe (Husky)	Canadian Petroleum Producers Institute
Alan Walker	CSAP
Simone Mol	CSAP
Beth Power	CSAP

*“Speaking as the BC Business Council representative to CSAP’s TG6 Working groups, I would like to applaud CSAP for stepping up to the plate and organizing a process that welcomed stakeholder input. Bringing the major stakeholders together to make recommendations to the Ministry of Environment as a single voice makes sense and the BC Business Council was very glad to participate”.*

*Philip De Leeuw,  
BC Business Council*

# PERFORMANCE ASSESSMENT

## Committee Chair

Dave Newton, P.Geo.  
Committee

Bob Symington, P. Geo.  
Alex Bath, P. Geo.  
John Taylor, P. Eng.  
Kristi Thornhill, P. Eng  
Relday Zapf-Gilje, P. Eng  
Cindy Ott, P. Ag., PChem



## PURPOSE

The Performance Assessment Committee administers a system of audits, known as performance assessments to ensure the quality of submissions made by Approved Professionals. The committee appoints a roster of Panel Members from among members who conduct performance assessments under the direction of a delegated member of the Performance Assessment Committee. We continuously review the process to ensure the system is fair, equitable and transparent and that Approved Professionals fully understand their obligations and rights under the process. The committee meets monthly to discuss issues, to update the Performance Assessment Guidelines and to generate "Lessons Learned" from each assessment. "Lessons Learned" assist Approved Professionals with their submissions and ensure that information pertaining to regulatory and technical interpretations is available.

Committee has contributed to an overall improvement in the quality of submissions through timely distribution of information. Committee members have continued to work on behalf of society members and have contributed many hours over and above regular meetings. I would like to thank my fellow committee members for their commitment and professionalism without which we could not have made the significant progress we have over the past years.

---

David Newton, Chair

## Report

During 2011/2012 the committee continued to refine the performance assessment process to make it more readily understood and efficient. We have updated our Performance Assessment Guidelines to reflect the evolution of the process over the past three years. The revised guidelines are posted on the CSAP web page for reference by all.

## New Terms of Reference

Together with the help of the Governance Committee, we formalized our Terms of Reference. Those terms identified key activities such as managing the performance assessment process, maintaining a list of qualified panel members to complete performance assessments, and distributing 'Lessons Learned' to the membership. In that regard, several Performance Assessment Committee members presented seminars at Professional Development workshops. In addition, the Performance Assessment Committee works with the Board, other CSAP committees and the Ministry of Environment to identify processes and resources requiring improvement,

such that solutions can be developed which will benefit Approved Professionals who make or review submissions in the future.

## New Performance Assessment Process

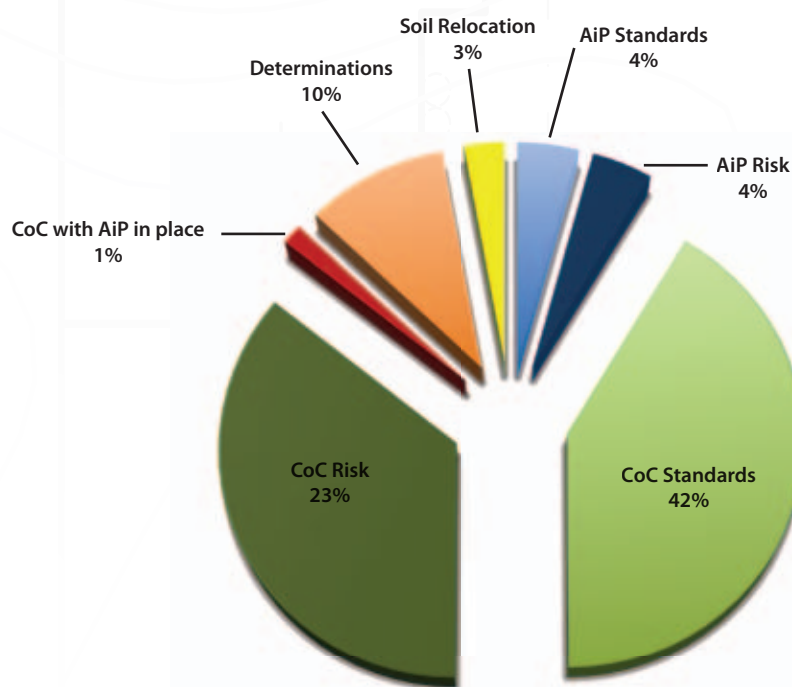
Overall, by reviewing and revising the performance assessment process, we have maintained timelines noted in previous years but have improved the feedback and interaction process, with the submitting approved professional undergoing assessment. The Performance Assessment Committee has developed the "four-month rule" for performance assessment addendums, which results in reduced timelines for Approved Professionals and submitting stakeholders, while maintaining a robust process. In conjunction with the Governance Committee, we are working to establish a transparent succession plan for committee membership which will be implemented in 2012.

## Dedication and Commitment

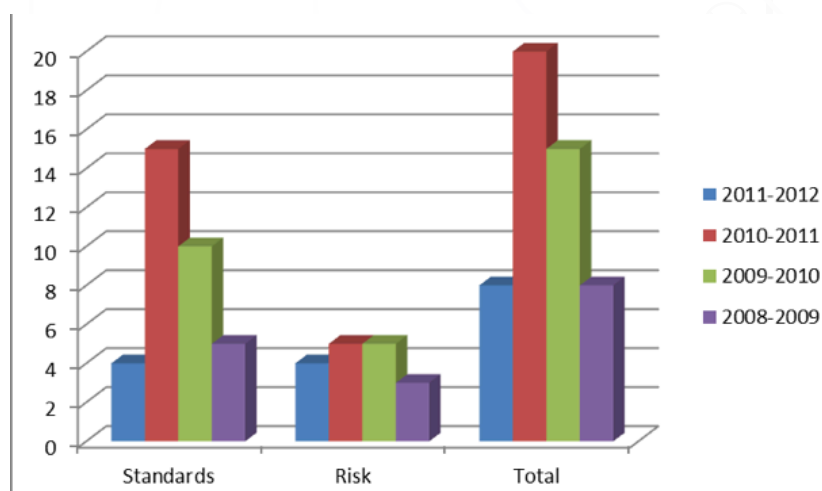
The CSAP Society has been in operation for almost four years, during which time the Performance Assessment



## Submission by Instrument Type



## Performance Assessment by Type



## Performance Assessment Timeline (Average Days)

Selected for PA	Completed < 1 month Days	Completed > 2 months	In progress
8	37.50%	37.50%	25%

Note: Approved Professional Response time and Ministry of Environment time to release instruments not included

## DISCIPLINE

### Committee Chair

John Balfour, P. Eng.

### Committee

Jerry Naus, P. Eng.



## PURPOSE

The CSAP Society disciplinary process and more specifically the nature of complaint that the society will address is outlined in bylaw 46, (1):

Any person may make a complaint in writing to the Executive Director alleging that a member:

(a) conducted CSAP work in an incompetent manner;

(b) was guilty of professional misconduct, conduct unbecoming a member, or conduct contrary to the Rules in the course of carrying out CSAP work; or

(c) breached the society's code of ethics under section 67.

## Report

Fortunately, we have had no need to invoke the discipline process to date, and do not foresee a pressing need to do so in the near future.

Should issues arise, we anticipate they are most likely to be addressed at a technical level through performance assessment. However, an important part of good governance is developing and maintaining a discipline process.

During 2011/2012, the vetting of the discipline process was completed and the Discipline Process flow chart was accepted by the Board. The flow chart is intended to provide a roadmap for the committee and investigators should a complaint be brought forward. Our lawyer advised that no changes to the bylaws are required and that the existing process is defensible.

This past year has been rewarding and I thank my fellow committee member for his help and support in completing the discipline process review.

John Balfour, Chair

*This past year has been rewarding and I thank my fellow committee member for his help and support in completing the discipline process review.*

*John Balfour, Chair*

## BOARD OF DIRECTORS

Jim Malick, Ph.D., R.P.Bio., P.Ag.  
President

Cindy Ott, M.Sc., P. Ag., GeoL., PChem  
Vice President

John Balfour, M.Sc., P. Eng.  
Secretary Treasurer, Chair Discipline Committee

Guy Patrick, M.Sc., P. Eng.  
Chair, Membership Committee

Patricia Milller, M.Sc., R.P. Bio.  
Vice Chair, Membership Committee

Greg Sutherland, Ph.D., R.P. Bio.  
Chair, Technical Review Committee

Alan Walker, M.Sc., P. Eng.  
Chair, Governance Committee

David Newton, P. Geo.  
Chair, Performance Assessment Committee

Phil de Leeuw, B.Sc., MBA  
Industry Representative

Paul Cassidy, JD  
Environment Representative

Carrie Baron, P. Eng.  
Government Representative

Vince Hanemayer, P. Eng.  
Ministry of Environment Representative

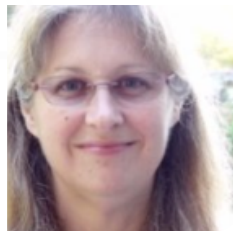
### Staff

Catherine Schachtel, B.Ed.  
Executive Director

Judy Gunderson  
Operations

Anna Popova  
Administrator

## CARRIE BARON JOINS CSAP BOARD



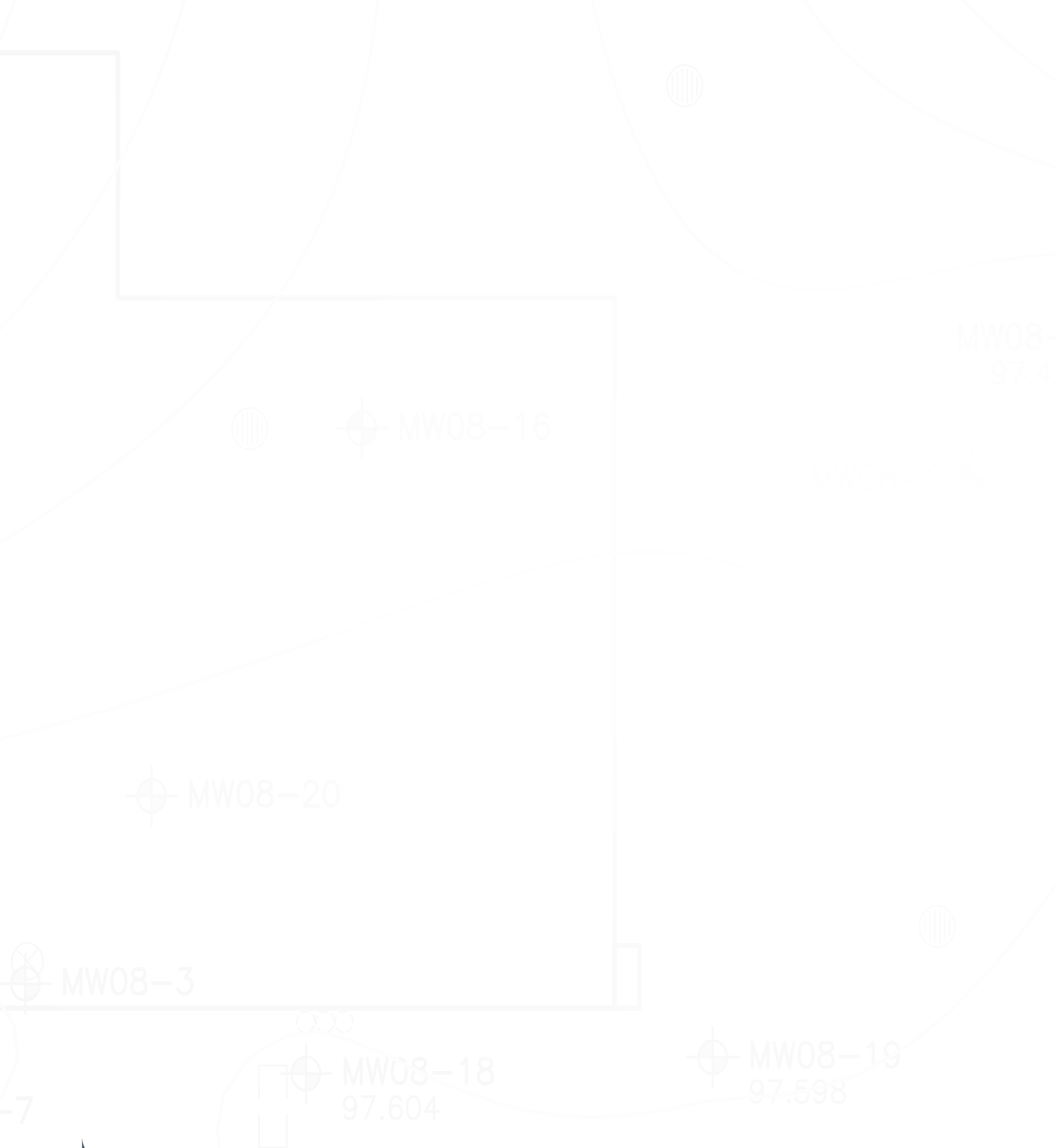
A professional engineer with over 26 years of experience in municipal, water resources and environmental engineering, Carrie is the Drainage & Environment Manager for the City of Surrey. Her responsibilities include overseeing the function of natural and built drainage systems; floodplain and dyke management; environmental planning initiatives; contaminated sites issues; soil deposition; erosion & sediment control; spill investigation; and environmental education within Surrey.

Her involvement in contaminated sites issues includes:

- › Participated on the Provincial Guidance Document 4 rewrite in early 2000's
- › Participant in Waste Management Act Advisory panel – Municipal perspective 2002
- › Participated as a UBCM representative at meetings with the Minister's office on "Procedures for Processing Site Profiles and Off-site Migration Issues" 2008
- › Currently participating as UBCM representative on TG6 Working Group 2 - Examination of Exemption Criteria
- › Within Surrey, provides guidance to staff on contaminated sites issues such as contamination onto City lands

from third parties, dealing with development proposals on previously or current contaminated lands, advising Surrey developments on potentially contaminated lands, reviewing monitoring reports in City Road ways, providing follow-up response to spill/contamination incidents and helping to develop innovative approaches to dealing with illegal drug facilities.





613 - 744 West Hastings Street  
Vancouver, BC  
Canada V6C 1A5

Phone: 604-451-4555  
Fax: 604-451-4558  
Email: [info@csapsociety.bc.ca](mailto:info@csapsociety.bc.ca)

[www.csapsociety.bc.ca](http://www.csapsociety.bc.ca)